

**UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT**

2013-1130

RICHARD A. WILLIAMSON,
Trustee for At Home Bondholders Liquidating Trust,
Plaintiff-Appellant,

v.

CITRIX ONLINE, LLC, CITRIX SYSTEMS, INC.,
MICROSOFT CORPORATION, and ADOBE SYSTEMS, INC.,
Defendants-Appellees,

and

WEBEX COMMUNICATIONS, INC., CISCO WEBEX, LLC,
and CISCO SYSTEMS, INC.,
Defendants-Appellees,

and

INTERNATIONAL BUSINESS MACHINES CORPORATION,
Defendant-Appellee.

Appeal from the United States District Court for the Central District
of California in Case No. 11-CV-2409, Judge A. Howard Matz

**REPLY BRIEF OF APPELLANT
TRUSTEE RICHARD A. WILLIAMSON**

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INTRODUCTION

The district court relied on pre-*Phillips* case law on claim term definition “by implication” to construe “graphical display representative of a classroom” and “graphical display comprising . . . a classroom region”¹ to include a “pictorial map” limitation, concluding that the specification revealed “the patentee intended only one type of graphical display.” Defendants do not defend this holding. Instead, Defendants set forth new and improbable legal and factual bases for the district court’s construction, contending it was necessary “capture” the “teachings” of the ’840 Patent and because the terms had no “plain and ordinary meaning.”

The Court should reject these arguments. It is undisputed that the district court’s construction has no support in the language of the claims, the prosecution history, or the extrinsic evidence. And the specification reveals neither implicit nor express intent of the patentee to limit the graphical classroom display terms to a “pictorial map” or define the graphical classroom display terms to mean “pictorial map.”

¹ As he did in his Opening Brief, Williamson refers to these terms collectively as the “graphical classroom display terms” for the convenience of the Court and the parties.

Even if it were proper to limit a patent's claims to the "teachings" of its specification, it is not proper here; even Defendants acknowledge that the specification identifies and describes other methods of graphical display and never allege that other methods of graphical display were unknown in the art or outside the grasp of one skilled in the art. RB at 22-23. This Court should adopt a construction that does not artificially limit the graphical classroom display terms to the preferred embodiment.

Defendants also ask this Court to do something it has never done before—(1) hold that a claim term not written in "means" language is subject to 35 U.S.C. § 112 ¶ 6², (2) find that claim term indefinite for failing to meet the disclosure requirements of 35 U.S.C. § 112 ¶ 6, and then (3) summarily invalidate the claims that include that term. To reach this improbable end, Defendants ask the Court to interpret 35 U.S.C. § 112 ¶ 6 to apply to all "functional claiming." This interpretation is wrong. Congress expressly provided that Section 112 ¶ 6 applies only to claim elements "expressed as a means or step for

² To maintain consistency with the parties' prior briefing, Williamson references 35 U.S.C. § 112 using the paragraph identifiers used prior to the enactment of Pub. L. 112-29 (2011) (*e.g.*, "§ 112 ¶ 6" instead of "§ 112(f)").

performing a specified function without the recital of structure, material, or acts in support thereof.”

Defendants’ arguments, if adopted by this Court, would unjustifiably add uncertainty to the “settled expectations of the inventing community.” *Ariad Pharm., Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1347 (Fed. Cir. 2010) (en banc). But this Court should reject them on a more prosaic ground: failure of proof. There is no support in the record for the district court’s determination that the patentee intended the graphical classroom display terms to mean “pictorial map” or that “distributed learning control module” was a “nonce word” substitute for “means.” The Court should reverse the district court’s claim construction order and entry of judgment and remand for further proceedings.

ARGUMENT

I. The District Court’s Construction of the Graphical Classroom Display Terms Improperly Imports Limitations from the Preferred Embodiment and Should Be Reversed

A. The District Court Erred in Construing the Graphical Classroom Display Terms “By Implication”

Citing pre-*Phillips* case law on claim term definition “by implication,” the district court ruled that the ’840 Patent’s specification “consistently describes the graphical representation of a classroom only as a ‘map’ of a classroom.” A22-23 (quoting *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Grp., Inc.*, 262 F.3d 1258, 1271 (Fed. Cir. 2001)). From this, it concluded that “the patentee intended only one type of graphical display”—a “pictorial map” that “identifies presenter(s) and audience member(s) by their locations on the map.” *Id.*

Williamson explained in his Opening Brief that the district court erred in holding that these graphical classroom display terms were defined by implication because the specification does not “repeatedly, consistently, and exclusively” use those terms to refer only to a pictorial map. AOB 30-35; see, e.g., *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004). Defendants do not contend that the specification uses the graphical classroom display terms repeatedly,

consistently, and exclusively to refer only to a pictorial map, and they do not otherwise rely on the “doctrine of implicit claim definition.” RB at 25; see *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1368 (Fed. Cir. 2012) (noting that post-*Phillips*, an “‘implied’ redefinition must be so clear that it equates to an explicit one”).

Therefore, the district court erred in finding the terms defined by implication. When this erroneous finding is set aside, no facts support the district court’s importation of limitations from the preferred embodiment. Under *Phillips*, express lexicography and express disavowal are the *only* exceptions to the general rule that words of a claim must be given their customary and ordinary meaning as understood by a person of ordinary skill in the art. *Thorner*, 669 F.3d at 1365-66 (Fed. Cir. 2012) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc)). The graphical classroom display terms do not *mean* “pictorial map.” The district court implicitly acknowledged that “graphical display representative of a classroom” is broader than a “pictorial map” of a classroom when it determined that the patentee “intended *only one type* of graphical display of this ‘partially virtual’ classroom.” A23 (emphasis added). And it is

undisputed that the patentee never expressly defined the graphical classroom display terms to require a “pictorial map” or otherwise disavowed the full scope of the claim terms.

The patentee could have used the claim term “map” in the claims. Instead, he used the broader terms “graphical display representing a classroom” and “graphical display comprising . . . a classroom region,” accepting a higher risk of invalidation due to a greater body of prior art. The district court erred in limiting these terms to the “pictorial map” in the preferred embodiment.

B. Defendants’ New Bases for the District Court’s Construction Are Also Flawed

1. The District Court’s Construction Is Not Required to “Capture” the ’840 Patent’s “Teaching”

Defendants contend the district court’s construction is proper because it “faithfully captures the ’840 Patent’s teaching of the type of space being addressed . . . and the specification’s consistent and exclusive teaching of how to graphically represent such a ‘virtual’ space.” RB at 24. As discussed below, this theory is flawed.

Defendants make this argument because the Court has not spoken in a unified voice as to whether a patent’s description of the invention

constrains the outer bounds of its claims. At times, the Court has held:

“The written description part of the specification itself does not delimit the right to exclude. That is the function and purpose of claims.”

Markman v. Westview Instruments Inc., 52 F.3d 967, 980 (Fed. Cir.

1995) (en banc). The written description’s role in construing claims is

limited to guiding the interpretation of the words of the claims, because

another mechanism polices its outer boundary: claims that reach

beyond it are invalid under 35 U.S.C. § 112 ¶ 1’s written description

requirement. *See Ariad*, 598 F.3d at 1351. Other times, the Court has

held that “[a]n inventor is entitled to claim in a patent what he has

invented, but no more. . . . Therefore, in construing a claim there are

two limiting factors—what was invented, and what exactly was

claimed.” *MySpace, Inc. v. GraphOn Corp.*, 672 F.3d 1250, 1256 (Fed.

Cir. 2012).

This panel need not resolve this issue here, however, because the district court’s construction fails under either approach: the ’840 Patent

does not claim what it does not describe. *Akamai Technologies, Inc. v.*

Limelight Networks, Inc., which Defendants cite, is both instructive and

easily distinguished. The patents in *Akamai* were directed to a web

content delivery system that solved the problem of slow delivery of embedded web content like images, video, and sound (“embedded objects”) by storing these embedded objects separately from the web pages on which they were embedded. 629 F.3d 1311, 1314-16 (Fed. Cir. 2010). This required modifying the URL associated with each embedded object to associate it with the server hosting the embedded object. *Id.* at 1316. Although the specification consistently described the invention as a method of modifying each embedded object’s URL with this new address information, the patents claimed methods of associating an embedded object with an “*alphanumeric string*” and did not require use of the embedded object’s URL. *Id.* at 1324-26. The Court affirmed the district court’s construction that the term “alphanumeric string” required the embedded object’s URL. *Id.* This was proper not only because of the specification’s constant description of the invention as a method and system of modifying embedded object URLs, but also because the specification made clear that this was “the only method to achieve the claimed association between an alphanumeric string and the embedded object.” *Id.* By claiming a method that did not use an embedded object’s URL, the patentees were

claiming a method of web content delivery that they had never invented. *Id.*

Not so here. The '840 Patent's specification never describes the invention as a pictorial map; it describes a *distributed learning system* that provides presenter and audience members with, among many other features, "a classroom- or auditorium-like metaphor." A67 (2:35-36). This classroom metaphor only "*preferably* provides a map of the classroom showing the relative relationships among presenters and audience members." A67 (2:37-39) (emphasis added). It does not *require* a map of the classroom. The Court in *Akamai* noted five separate instances in the specification describing the *invention* as modifying an embedded object's URL. *See* 629 F.3d at 1326-27. Here, there are *no* instances of the specification describing the *invention* with the limitations the district court has imposed. This is not a case in which a pictorial map limitation is "required to tether the claims to what the specifications indicate the inventor actually invented." *Retractable Techs. v Becton, Dickinson & Co.*, 653 F.3d 1296, 1311 (Fed. Cir. 2011). Defendants do not allege that other methods of graphical display, such as a chart or list, were unknown in the art or outside the grasp of one

skilled in the art. In fact, Defendants acknowledge the patentee described other methods of graphical display when they argue the patentee distinguishes a “textual”³ “list of participants” from a “pictorial map.” RB at 22-23.

Defendants contend for the first time that the ’840 Patent’s specification distinguishes between a “pictorial map” and a “textual” “list of participants” in such a way that a “graphic display representative of a classroom” must be construed to exclude a “textual” “list of participants.” RB at 22-23. But the specification never “distinguishes” between these two terms, and it never suggests that a graphical display representative of a classroom cannot identify participants using a list. Nor do the claims: while nearly all of the ’840 Patent’s claims require a “graphic display representative of a classroom” or a “graphic display comprising . . . a classroom region,” no claims differentiate the classroom terms from a “list of participants,” a

³ Defendants mischaracterize the lists by repeatedly describing them as “textual.” RB 22-23. The “presentation/feedback” region displays *textual information* but there is no indication that this region or even the list of participants is only “textual.” A68 (3:14-18); A71 (9:56-59). Rather, the patent clearly states that the presentation/feedback region displays “a list of participants . . . *and* a text window displaying communicated text.” A71 (9:56-59) (emphasis added).

“feedback region,” or a “presentation/feedback region.” No evidence suggests the patentee intended that the term “graphical display representative of a classroom” exclude a graphical display arranging presenter and audience members in a list.

Finally, as Williamson noted in his Opening Brief, nothing else in the ’840 Patent or its prosecution history suggests that it claims what it does not describe. *See* AOB 30-33. Defendants do not dispute that the “pictorial map” limitation is unnecessary to tether the claim term to its stated function, that the specification never recites the “pictorial map” as one of the objectives of the invention,⁴ or that the “pictorial map” limitation is never used in the specification to distinguish over prior art.⁵

⁴ Defendants respond that pictorial map limitation is simply not “inconsistent” with the ’840 Patent’s stated objectives. RB at 27.

⁵ Defendants do challenge Williamson’s claim that the “pictorial map” limitation was never used in the *prosecution history* to distinguish over prior art, RB at 28, but the portion of the prosecution history Defendants cite actually supports Williamson’s claim. The patentee never touted the display of a “classroom map” or a “pictorial map” as an improvement over the prior art, never equated the claimed “graphical display representative with a classroom” with “classroom map,” and never described the ’840 Patent as offering a classroom map. *See* A1267-68. In fact, the patentee never once used the word “map” in reference to the claimed invention. *See* A1240-73.

2. Alleged Lack of “Plain and Ordinary Meaning” Is Not a Basis for Upholding the District Court’s Construction

Defendants contend that because the graphic classroom display terms have “no plain and ordinary meaning to a person skilled in the art,” they “require construction in view of the specification,” and importation of limitations is proper. RB at 17-23. Therefore, Defendants argue, these terms must *only* mean the preferred embodiment depicted in Figure 6.

Contrary to Defendants’ contention, Williamson never “agreed” that the terms had no plain and ordinary meaning. Defendants rely on the fallacy of the inverse, writing: “Neither Williamson nor his expert argued that these terms have a plain and ordinary meaning to a person skilled in the art. Nor did Williamson rely on dictionary definitions to support his proposed constructions.” RB at 18. Under Defendants’ logic, Williamson “agrees” that the world is flat because he never declared it to be round.

More importantly, the claim terms *do* have a plain and ordinary meaning. The term “graphical display representative of a classroom” is not a highly technical term or a term coined by the inventor. It is

written in plain English, and it derives its meaning not only from the context of its use, but from each word that it comprises. Defendants have never argued that the terms “graphical,” “display,” or “graphical display” lack plain and ordinary meaning or require construction.

These terms are used throughout the patent in reference not only to the graphical display of a classroom, but to many other aspects of the claimed distributed learning system.⁶ As Williamson argued at the district court, these terms “are easily understood” without construction and have “no special meaning in view of intrinsic or extrinsic evidence.”

A598. Indeed, leading technical dictionaries offer uncontroversial definitions of these common terms.⁷ Outside the context of the ’840

⁶ A69 6:17-20 (classroom environment module to “graphically display” poll results); A71 10:35-37 (“graphical display illustrating controls for selecting first and second data streams”); A7110:60-61 (“graphical display illustrating controls for locating a plurality of data streams”); A72 12:34-42 (“graphical display comprising . . . a presenter content selection control” and (“graphical display comprising . . . a first presenter content display region”).

⁷ *E.g.*, *McGraw-Hill Dictionary of Scientific and Technical Terms* 969 (5th ed. 1994) (“defining “graphic display” as “the display of data in graphical form on the screen of a cathode ray tube”); *see also Phillips*, 415 F.3d at 1322-23 (courts may consult dictionaries “at any time” when construing claim terms, “so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents”).

Patent, “graphical display representative of a classroom” means *graphical display representative of a classroom*.

The cases Defendants cite are easily distinguishable, as they all involve an agreement between the parties that the term in question was a coined term⁸ or clear intrinsic evidence that the term was a coined term.⁹ There is neither agreement nor clear any evidence that the graphical display of a classroom terms were coined terms.

C. The Surrounding Claim Language, Prosecution History, and Extrinsic Evidence Do Not Support the District Court’s Construction Under Any of Defendants’ Theories

Defendants rely exclusively on the ’840 Patent’s specification to support the district court’s construction. In light of this, many of the cases Defendants cite are irrelevant. For example, *IGT v. Bally Gaming International, Inc.* concerned a claim construction required by the surrounding claim language. 659 F.3d 1109, 1120 (Fed. Cir. 2011). There, the Court affirmed the district court’s determination that the claim term “command,” as used in the context of the claims, meant a

⁸ *E.g., MyMail, Ltd. v. Am. Online, Inc.*, 476 F.3d 1372, 1376 (Fed. Cir. 2007); *Goldenberg v. Cytogen, Inc.*, 373 F.3d 1158, 1164 (Fed. Cir. 2004).

⁹ *E.g., Irdeto*, 383 F.3d at 1298 (applicant clearly stated during prosecution history that term was a coined term).

“reconfiguration command” that reconfigured a gaming device to pay out additional money. *Id.* This construction was necessary because additional claim language recited the limitation of “paying at said one gaming device in accordance with the command.” *Id.* Similarly, *Hologic, Inc. v. SenoRx, Inc.* concerned an ambiguity created by surrounding claim language. 639 F.3d 1329, 1335 (Fed. Cir. 2011) (“asymmetrically located and arranged” ambiguous as used in claims because “asymmetry is a relative concept that can only exist in relation to some reference”).

Here, unlike the bulk of the cases Defendants rely on, there is undisputedly no support in the language of the claims, the prosecution history, or the extrinsic evidence for the district court’s construction importing limitations into the claims.

D. Only Williamson’s Construction of the Graphical Classroom Display Terms Is Proper Under This Court’s Jurisprudence

Williamson’s proposed definition tracks the specification’s express definition of classroom: “a viewable illustration of an at least partially virtual space that allows participants to interact.” Williamson’s

definition also clarifies that “participants,” as used here, means both audience members and presenters. AOB at 26.

Of Defendants’ four arguments against Williamson’s proffered construction, only one takes issue with the specification’s express definition of “classroom.” Defendants contend that it is “hopelessly indefinite” because it is “silent on what that display must look like” and “provide[s] no guidance to one skilled in the art as to how to create a graphical display of a classroom.” RB at 30-31. This argument has two major flaws. First, there is no precedent suggesting a defendant may “defensively” evoke the specter of invalidity to drive claim construction. A defendant who believes that an express definition is “hopelessly indefinite” should seek judgment of invalidity for failure to satisfy 35 U.S.C. § 112 ¶ 2, not a narrower reading of the claim.

Second, the claim construction need not address the “look” of the display. It is wholly appropriate to offer definitional guidance through other parameters, including functional limitations (*e.g.*, a “viewable illustration” that allows participants to “interact”). *See Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986); *Biosig Instruments, Inc. v. Nautilus, Inc.*, --- F.3d ----, 2013 WL

1776745, at * 6 (Fed. Cir. Apr. 26, 2013) (“inherent parameters” sufficient to understand metes and bounds of the term).

Defendants’ other three arguments all concern the requirement that “participants,” as used in the express definition, means presenters *and* audience members. As stated in Williamson’s Opening Brief, this construction is proper in view of the description of the invention and recitation of its stated objectives. AOB at 27-28. It is also proper in light of the patentee’s unambiguous statement to the examiner, made specifically in the context of describing the “graphical display representative of a classroom,” that *“this claimed feature of the present invention allows the audience members to interact in a virtual classroom environment with both the presenter and other audience members.”* A1267-68 (emphasis added).

II. The District Court Erred in Determining That “Distributed Learning Control Module” Is an Indefinite Means-Plus-Function Term and Invalidating Claims 8-16

Defendants seek affirmance of an unprecedented result. The Responding Brief discloses no previous instance where this Court (1) held that a claim term not written in “means” language is subject to 35 U.S.C. § 112 ¶ 6; (2) found that claim term indefinite for failing to

meet the disclosure requirements of § 112 ¶ 6; and then (3) invalidated the claims that include that term. Yet that is what the Defendants would have this Court do. There are good reasons for the lack of precedent. Indefiniteness is failure to satisfy 35 U.S.C. § 112 ¶ 2, which requires the claims “particularly point[] out and distinctly claim[] the subject matter which the inventor or a joint inventor regards as the invention.” A claim is indefinite only when it is “not amenable to construction” or “insolubly ambiguous.” *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005). In light of the statutory presumption of validity, if a claim is amenable to two constructions—one construction that would invalidate it under § 112 and another that would not—the latter is the proper construction. *Exxon Research & Eng’g Co. v. United States*, 265 F.3d 1371, 1380 (Fed. Cir. 2001) (“close questions of indefiniteness . . . are properly resolved in favor of the patentee.”).

Fortunately, this Court need not resolve such a “close question” here. Defendants’ evidence falls far short of the clear-and-convincing burden, and the district court’s simultaneous failure to view the

sufficiency of the '840 Patent's disclosure from the point of view of one skilled in the art is a basis for reversal.

A. “Distributed Learning Control Module” Is Not a Means-Plus-Function Term Subject to 35 U.S.C. § 112 ¶ 6

Turning § 112 ¶ 6 on its head, Defendants suggest that “functional claiming” is sufficient evidence that a claim falls under § 112 ¶ 6. RB at 15, 32-33, 36. But by its plain language, the statute does not apply to *all* claim terms that recite functions. It only applies to terms “*expressed as a means or step*” for performing a function without recitation of “*sufficient structure for performing these functions.*” 35 U.S.C. § 112 ¶ 6 (emphasis added).¹⁰ This Court has held that § 112 ¶ 6 applies to terms without the words “means for” if the terms are mere “nonce” words used as a substitute for “means for.” *Lighting World Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1360 (Fed. Cir. 2004). But in that situation, the Court has been “unwilling to apply [§ 112, ¶ 6]

¹⁰ Contrary to Defendants' suggestions, the Patent Act does not bar the use of “functional” language in claims. *See Biosig*, 2013 WL 1776745, at *9 (“this court’s jurisprudence does not proscribe drafting or defining claims in relation to their functions”). Nor does it mandate compliance with § 112 ¶ 6 to use such language. *Id.* (while “functional language in a means-plus-function format is explicitly authorized by statute,” “[f]unctional language may also be used to limit the claims without having the means-plus-function format.”).

without a showing that the limitation essentially is *devoid* of anything that can be construed as structure.” *Flo Healthcare Solutions, LLC v. Kappos*, 697 F.3d 1367 (Fed. Cir. 2012) (emphasis added). The necessary structure may flow from (1) the term’s use “in common parlance,” *Lighting World*, 382 F.3d at 1354; (2) its use by persons of skill in the pertinent art, *id.*; (3) the surrounding claim language, *Flo Healthcare*, 697 F.3d at 1374; or (4) the use of the term in the rest of the patent, *Inventio AG v. Thyssenkrupp Elevator Ams. Corp.*, 649 F.3d 1350, 1358-60 (Fed. Cir. 2011).

It is the challenger’s burden to make the showing that a “non-means” limitation is devoid of structure to overcome the presumption that it is not a means-plus-function term. *See Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1373 (Fed. Cir. 2003). This presumption is not “readily overcome,” *Lighting World*, 382 F.3d at 1358, and on numerous occasions, this Court has found a failure of proof as grounds for reversal. *E.g.*, *Apex*, 325 F.3d at 1373 (“In the absence of any more compelling evidence of the understanding of one of ordinary skill in the art, the presumption that § 112, ¶ 6 does not apply is determinative”); *Inventio*, 649 F.3d at 1360.

When one reviews Defendants’ “evidence” against this framework, their failure of proof is evident.

1. No Extrinsic Evidence Supports the District Court’s Determination That “Distributed Learning Control Module” Is a Means-Plus-Function Term

Defendants’ Responding Brief makes it clear that no extrinsic evidence supports the district court’s finding that a person with skill in the art would find “distributed learning control module,” as used in the claims, to be a “nonce” term lacking sufficient structure. Defendants argue that “in the computer science context . . . the term ‘module’ is generic and fails to connote any specific algorithm for implementing a claimed function.” RB at 15. Defendants also allege that “the phrase ‘distributed learning control module’ has no dictionary definition.” RB at 41. But they offer no proof for either contention, merely claiming that no evidence provides otherwise: in the words of Carl Sagan, Donald Rumsfeld, and the Tenth and Seventh Circuits, “absence of evidence is not evidence of absence.” *United States v. Acosta-Gallardo*, 656 F.3d 1109, 1117 (10th Cir. 2011); *see NLRB v. Louis A. Weiss Mem’l Hosp.*, 172 F.3d 432, 446 (7th Cir. 1999) (“An absence of evidence does not cut in favor of the one who bears the burden of proof on an issue.”).

The Responding Brief downplays the importance of extrinsic evidence. RB at 33-34. But in only one published opinion cited by Defendants was this presumption overcome without any support in the extrinsic evidence. That case, *Welker Bearing*, is easily distinguished. There, the Court found the term “mechanism for moving said finger” to be subject to § 112 ¶ 6 because of the term’s “unadorned” use of the “vague term” *mechanism* to mean “means.” *Welker Bearing Co. v. PHD, Inc.*, 550 F.3d 1090, 1096 (Fed. Cir. 2008). That determination relied on this Court’s case law regarding the term “mechanism,” not “module,” and it specifically noted that the patentee could have escaped § 112 ¶ 6 by adding adjectival qualifiers such as “finger displacement mechanism” or “lateral projection/retraction mechanism.” *Id.* As discussed below, “*distributed learning control module*” contains such adjectival qualifiers.

2. No Intrinsic Evidence Supports the District Court’s Determination That “Distributed Learning Control Module” Is a Means-Plus-Function Term

As no extrinsic evidence supports Defendants’ position, and Defendants never argue the prosecution history supports their position, the district court’s application of § 112 ¶ 6 must rely solely on the ’840

Patent itself. As Williamson stated in his Opening Brief, nothing in the patent suggests that “distributed learning control module” is a “nonce” word devoid of structure.

Defendants’ arguments otherwise are unavailing. First, as the district court did, Defendants isolate the word “module.” RB at 36. But the term at issue is “distributed learning control module,” not “module.” This Court noted in *Apex* that the “primary source” of the district court’s error in applying § 112 ¶ 6 was its “reliance on *single words of the limitations*, e.g., ‘circuit,’” as opposed to the limitations *as a whole*, e.g., ‘a first interface circuit for receiving keyboard and cursor control device signals from the workstation.’” 325 F.3d at 1372 (emphasis added). This Court has repeatedly stressed that the use of adjectival qualifications “further narrow[] the scope of those structures covered by the claim and make[] the term more definite.” *Id.* at 1374; *Inventio*, 649 F.3d at 1358 (distinguishing “device” from “modernizing device”).¹¹

¹¹ Defendants cite two unpublished cases for the proposition that “module” is simply a substitute for “means.” RB at 36. Both cases, however, involved reconciling terms written in means-plus-function language with otherwise identical terms that merely replaced “means” with “module.” See *Ranpak Corp. v. Storopack, Inc.*, 168 F.3d 1316 (Fed. Cir. 1998) (per curiam) (not precedential) (“settable control means” and “settable control module”); *Kozam v. Phase Forward Inc.*,

Defendants argue that the district court properly ignored the three adjectival modifiers “distributed learning control” because “Williamson offers no support or record citations for the contention that the presence of the phrase ‘distributed learning control’ before ‘module’ somehow alters the analysis.” RB at 41. This reads three words out of the claim without justification. *See Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) (“A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so.”). It also improperly shifts the burden to Williamson to prove that “distributed learning control,” unlike the adjectival qualifiers in *Apex* and *Inventio*, have meaning. Regardless, Defendants ignore the fact that “distributed learning control” before “module” must alter the analysis because it names a specific module described extensively *throughout* the specification—a fact they implicitly admit. RB at 36-37, 45-52; *e.g.*, A67 (2:20-34); A69 (5:34-65, 6:54-58); A70 (7:1-5, 20-23).

No. MJG-04-1787, 2005 WL 6218037, at *7 (D. Md. Aug. 29, 2005) (“data verification means” and “data verification module”). Neither court went so far as to hold that the “module” was the same as “means” outside the context of the specific claims in those patents. *Id.*

Defendants argue that *Inventio* differs because “[t]he written description in that case provided a block diagram . . . depicting the internal components of the claimed ‘modernizing device.’” RB at 37-38. But *Inventio* did not turn on the level of detail provided by the written description; it held that “modernizing device” was not subject to § 112 ¶ 6 because “the *claims* indicate that the ‘modernizing device’ functions as an electrical circuit that receives signals, processes signals, and outputs signals to other components in the patented system.” 649 F.3d at 1358 (emphasis added). As with the modernizing device in *Inventio*, the distributed learning control module (“DLCM”) structure is evident from its role within the claimed systems. The ’840 Patent’s *claims* indicate that the DLCM functions as a component of the distributed learning control server. A72 (11:47-62). The DLCM receives communications transmitted between the presenter and audience member computer systems, relays the communications to an intended receiving computer system, and coordinates the operation of the streaming data module through input from the presenter computer system. A72 (11:56-62). As in *Inventio*, the *claims* “delineate the components that the [DLCM] is connected to, describe how the [DLCM]

interacts with those components, and describe the processing that the [DLCM] performs.” 649 F.3d at 1359. And as in *Inventio*, the ’840 Patent’s specification additionally supports the conclusion that the DLCM is not subject to § 112 ¶ 6 by describing the structure of certain embodiments of the DLCM over several paragraphs—it “controls the communications among the various computer systems” using specific hardware and software. A69-70 (5:37-46; 5:48-65; 7:1-34; 7:64-8:7).

Finally, Defendants argue that *Apex* and *MIT v. Abacus Software*, 462 F.3d 1344 (Fed. Cir. 2006), are inapposite because they involve circuits. RB at 38-39. But that is irrelevant. What matters is the ’840 Patent’s use of “module” with an adjectival modifier provides sufficient structure like the use of the term “circuit” with an adjectival modifier in those cases—they both disclose the inputs, outputs, and objectives of the claim term. Lastly, Defendants contend—without evidence—that “[u]nlike ‘circuit,’ ‘module’ is not a structural term.” RB at 39. But bare assertions cannot overcome the presumption against means-plus function. *See Apex*, 325 F.3d at 1373.

The module term is thus not a means-plus-function term and the judgment of the District Court must be reversed.¹²

B. Assuming the Term Is Means-Plus-Function, the Patent Discloses Sufficient Structure Corresponding to the Function of “Coordinating the Operation of the Streaming Data Module”

Assuming the term is means-plus-function, the district court’s finding of indefiniteness is proper only if supported by clear and convincing evidence. *Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1376-77 (Fed. Cir. 2001). Defendants concede that their only evidence is the ’840 Patent itself. *See* RB at 44-54. They do not challenge Williamson’s argument that the district court and Defendants have both never viewed the sufficiency of the disclosure from the point of view of a person with skill in the art when there is some disclosure—as they must. *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1313 (Fed. Cir.

¹² Defendants ask this Court to not address the district court’s conclusion that “streaming data module” is also a means-plus-function term. RB at 32 n.6. This term was not the basis for the district court’s invalidity determination because the district court did not find it indefinite. A33. Because the district court used the same flawed reasoning to construe both terms as means-plus-function terms, A30-33, reversing only as to “distributed learning control module” would return this matter to the district court with unnecessary uncertainty regarding the proper construction of “streaming data module.” The Court should reverse as to both terms.

2012); *AllVoice Computing PLC v. Nuance Commc'ns, Inc.*, 504 F.3d 1236, 1240 (Fed. Cir. 2007) (reversing finding of indefiniteness and noting that identifying person of ordinary skill of the art is “essential to administering the definiteness test”).

This alone is fatal to the district court’s finding of indefiniteness. By failing to view the ’840 Patent from the view of one skilled in the art after finding “some information regarding the composition of the control module,” A33, the Court lacked the proper perspective to determine whether an algorithm was necessary, let alone sufficient. *See Med. Instrumentation & Diagnostics Corp. v. Elektra AB*, 344 F.3d 1205, 1213-14 (Fed. Cir. 2003) (“[T]here would be no need for a disclosure of the specific program code if software were linked to the converting function and one skilled in the art would know the kind of program to use.”); *Aristocrat Techs. Austl. Pty. v. Multimedia Games, Inc.*, 266 F. App’x 942, 947 (Fed. Cir. 2008) (not precedential) (§ 112 ¶ 6 “does not require that a particular algorithm be identified if the selection of the algorithm or group of algorithms needed to perform the function in question would be readily apparent to a person of skill in the art”).

Neither Defendants nor the district court has ever attempted to analyze the “coordinating” function from the point of view of one of skill in the art despite the existence of some disclosure. The Court below merely concluded there was no algorithm for the “coordinating” step without explanation. A33; RB at 45-52. They never explain why a person experienced in the art would expect or desire further structure describing the “coordinating” function; more importantly, they never point to any evidence supporting this conclusion. A33; RB at 45-52. Nor, for that matter, do they suggest what would constitute a *sufficient* algorithm, except to argue it should have more steps. A33; RB at 54.

1. The Patent Discloses Structure Corresponding to “Coordinating the Operation of the Streaming Data Module”

District courts have recognized that applying this Court’s algorithm jurisprudence as a rigid rule would lead to incongruous results, concluding “not every patent that utilizes computer processing power must disclose all the algorithms utilized.” *E.g., Stanacard, LLC v. Rebtel Networks, AB*, 680 F. Supp. 2d 483, 501 (S.D.N.Y. 2010). In *Stanacard*, the court determined that in the telecommunications context, there was no need to provide an algorithm for “caller ID

detection module,” “telephone number detection module,” and “call connection module,” because they perform well-known functions and are “practiced by every telephone service provider.” *Id.* at 502; *see also SPX Corp. v. Bartec USA, LLC*, 557 F. Supp. 2d 810, 819-20 (E.D. Mich. 2008) (no need to provide algorithm for “means for generating modulated signals” because “modulation is a simple process that is well known in the art, and not some new development on the cutting edge of electrical and computer engineering.”).

The claim language provides the link between the “coordinating¹³” function and the disclosed algorithm. As noted in Williamson’s opening brief, the ’840 Patent describes the operation of the DLCM throughout the specification. AOB at 50-53. This disclosure provides an algorithm that is clearly linked to “coordinating the operation of the streaming data module” because the *claim* itself describes the inputs, outputs, and objectives of the DLCM as it relates to the streaming data module (“SDM”). AOB at 50; A72 (11:26-67). Specifically, the DLCM coordinates the selection by controlling the *selecting* process for

¹³ Defendants’ argument that “coordinating” is not used in the specification is a distraction when it is clear to one having skill in the art that coordination includes the controlling and managing of other modules. A654-55 ¶¶ 63-64; A7005-09 ¶¶ 14, 15, 16, 18, 20, 26-27.

selecting the “*selected* remote streaming data source” that the SDM provides to the presenter and audience member computer systems. *See* A72 (11:26-67).

The specification provides the algorithm for controlling the selection process. While Defendants argue that Figures 4 and 5 are not linked to the selection process, they concede the specification explicitly mentions that the images are displayed “at the direction of the DLCM.” RB at 49. In arguing for further disclosure, Defendants ignore that the specification and the figures¹⁴ indicate at least one algorithm by which the remote source is selected (*e.g.*, Fig. 4, (1) submit an address field or select a channel field; (2) select the “add this node button”; (3) select the “back” link, A70 (7:1-19); Fig. 5, select from a list box of pre-selected sources, A70 (7:20-34)). The specification also describes the type of data that can be selected (*e.g.*, cameras and video sources), A70 (7:64-8:7)). Indeed, facing multiple citations to algorithms linked to the “coordination” function, Defendants’ mantra is that the disclosure is not sufficient. RB at 45-52. But under Federal Circuit law, that

¹⁴ Ironically, Defendants seize on a figure to import limitations into the classroom term definition, but discount the disclosure of multiple figures for the DLCM term.

determination is left to one skilled in the art. *Noah Sys.*, 675 F.3d at 1313; *AllVoice*, 504 F.3d at 1240. And Dr. Sourì has found it sufficient.

**2. The Patent Discloses an Algorithm
Corresponding to “Coordinating” to a Person
Having Skill in the Art**

Defendants incorrectly characterize Dr. Sourì’s declaration as providing an algorithm not present in the specification. RB at 53. But the district court found some disclosure. *See* A33. Dr. Sourì’s testimony does not “fill in the gaps”—rather, it provides the necessary context, from the point of view of one skilled in the art, for why one skilled in the art would find the specification provides sufficient structure, and it identifies this structure. AOB at 53-54. Not only is Dr. Sourì this case’s only expert, he is also the only person to have identified the level of skill in the art and the relevant field of art. A7003. Dr. Sourì noted that in the computer science context, and specifically in light of the “server-based architecture of the distributed learning system in claim 8,” the structure supporting all the functions of the DLCM was present. A7000-05.¹⁵ He states that “a person of ordinary skill in the art would

¹⁵ Defendants contend that Dr. Sourì’s declaration is not of record in this appeal. To the contrary, the district court stated in its order denying Williamson’s motion for reconsideration that it considered

understand that the objective of the DLCM is to administer or manage a remote learning environment.” A7005. It achieves this by “coordinating content and communication delivery to audience members under the control of a presenter.” *Id.* A preferred embodiment performs this “coordinating” function using a standard HTTP-based web server to “receive and respond to requests for data from the other computer systems.” A7006.

Finally, Defendants argue that the specification “merely describes functions and results, not algorithms,” and they discount Dr. Sourì’s testimony as “just a different functional description.” RB at 50, 54. Here, Dr. Sourì and Defendants’ attorneys simply disagree. But given the presumption of validity and acceptable evidence for claim construction, only Dr. Sourì’s opinion matters. Williamson’s sworn witness—the only offered witness claiming skill in the art—states that the input, output, and objective can serve as sufficient disclosed structure to implement the DLCM “in a variety of architectures.”

Dr. Sourì’s declaration, and found that it “basically elaborates on his previous submission.” A37-40. Defendants concede as much. RB at 43 (recognizing that “the district court’s order denying reconsideration makes clear that the court considered **both** of the Sourì declarations”) (emphasis added).

A7005. Defendants disagree but do not make clear what else would suffice.

Dr. Souri is not alone in his position. As the *Harvard Law Review* noted, in the computer science context, functional language is often unavoidable, and because “software is defined by function,” it is often preferable:

For example, “displaying information” could be performed with different graphics protocols like OpenGL or DirectX, with different operating system APIs, on different monitors like LCDs or CRTs, and so on. Similarly, “sending a request” could be performed over different kinds of networks such as a LAN, WAN, or the internet; over different low-level protocols like TCP/IP or UDP; over different application layer protocols like HTTP, FTP, or Telnet; and so on.

Note, *Everlasting Software*, 125 Harv. L. Rev. 1454, 1464-67 (2011-2012)

(internal formatting omitted). In the words of the author, the additional “implementation details” sought by Defendants are “arbitrary,” because “each of these implementation possibilities is known by a person having ordinary skill in the art . . . and is therefore enabled by disclosure of the function itself.” This is because “[i]n software, unlike with physical apparatuses, the patentable invention is new functionality, not performing old functionality in a more effective way by harnessing physical rules.” *Id.*

Defendants' proof of indefiniteness falls far below the clear-and-convincing standard. The Court should reverse and hold the module term is neither subject to § 112 ¶ 6 nor indefinite.

CONCLUSION

For all of the foregoing reasons, this Court should reverse the district court's claim construction order, vacate the judgment, and remand for further proceedings.

Respectfully submitted,

Date: May 20, 2013

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CERTIFICATE OF COMPLIANCE

Counsel for appellant Richard A. Williamson certifies:

1. This brief complies with the type-volume limitation of Federal Rule of Appellate Procedure 32(a)(7)(B). This brief contains 6,999 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(a)(7)(B)(iii) and Federal Circuit Rule 32(b).
2. This brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the typestyle requirements of Federal Rule of Appellate Procedure 32(a)(6). This brief has been prepared in a proportionally spaced typeface using Word 2010 in 14-point Century Schoolbook.

Respectfully submitted,

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CERTIFICATE OF FILING AND SERVICE

I hereby certify that on May 20, 2013, I electronically filed the foregoing document using the Court's CM/ECF filing system. Counsel was served via CM/ECF which constitutes service, pursuant to Fed. R. App. P. 25(c)(2), Fed. Cir. R. 25(a), and the Court's Administrative Order Regarding Electronic Case Filing 6(A) (May 12, 2012), to all registered CM/ECF users.

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